

No. 89-1079

## In the Supreme Court of the United States

OCTOBER TERM, 1989

PPG INDUSTRIES, INC., PETITIONER

v.

UNITED STATES ENVIRONMENTAL PROTECTION  
AGENCY, ET AL.ON PETITION FOR A WRIT OF CERTIORARI TO  
THE UNITED STATES COURT OF APPEALS FOR  
THE FIFTH CIRCUIT

## BRIEF FOR THE FEDERAL RESPONDENT IN OPPOSITION

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## QUESTIONS PRESENTED

1. Whether EPA acted arbitrarily in basing certain effluent limitation standards under the Clean Water Act, 33 U.S.C. 1251 *et seq.*, on the average of actual data from two plants, where the reviewing court found that the limitations are achievable through use of the model pollution control technology.
2. Whether EPA acted arbitrarily in establishing variability limitations for those standards by using statistical modeling techniques that account for the full range of variability that can reasonably be expected at plants that properly operate the model technology, where the reviewing court found that discharges that exceed the variability limits either would result from correctable problems or would be excused by the regulatory upset defense contained in 40 C.F.R. 122.41(n).



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### OPINIONS BELOW

The opinion of the court of appeals (Pet. App. 1a-172a) is reported at 870 F.2d 177; its opinion on partial rehearing (Pet. App. 173a-195a) is reported at 885 F.2d 253.

### JURISDICTION

The judgment of the court of appeals was entered on March 30, 1989. The opinion was clarified and modified in response to petitions for rehearing, which were otherwise denied on October 10, 1989. The petition for a writ of certiorari was filed on January 8, 1990. The jurisdiction of this Court is invoked under 28 U.S.C. 1254(1).

(1)

## STATEMENT

The Clean Water Act, 33 U.S.C. 1251 *et seq.*, directs the Environmental Protection Agency (EPA) to promulgate effluent limitations guidelines and standards to control the discharge of pollutants into the nation's waters by various categories of industries. In November 1987, EPA issued the regulations governing discharges by the organic chemicals, plastics, and synthetic fibers manufacturing industries (the OCPSF industries). Petitioner PPG Industries, Inc., a number of other industries affected by the regulations, and several trade associations (see Pet. ii-iii) filed petitions for review, alleging that the regulations were too stringent; the Natural Resources Defense Council (NRDC) filed its own petition for review and intervened in the industry petitions, alleging that the regulations were not stringent enough. The court of appeals carefully considered all the objections to the regulations, and in substantial part upheld the regulations. Petitioner seeks further review of two of its objections to the methods EPA used in calculating the applicable effluent limitations.

1. *The Statutory Framework.* The Clean Water Act, 33 U.S.C. 1251 *et seq.*, is designed to restore and maintain the chemical, physical, and biological integrity of the nation's waters (33 U.S.C. 1251(a)). This is to be achieved in part through the issuance by EPA of federal effluent limitations—technology based effluent restrictions for particular pollutants applicable to facilities within various industrial categories.<sup>1</sup> The Act directs EPA to regulate effluent

<sup>1</sup> EPA promulgates limitations that apply to existing facilities that discharge wastewater directly into navigable waters (33 U.S.C. 1311(b), 1314(b), 1316, 1317(a)), and to indirect dischargers—whose wastewater passes through publicly owned treatment plants (33 U.S.C. 1317(b)). In addition, EPA promulgates new source performance standards for direct and indirect dischargers (33 U.S.C. 1316, 1317(c)).

discharges in two, increasingly stringent, stages. First, EPA is to establish effluent limitations based on the "best practicable control technology currently available" (BPT). 33 U.S.C. 1311(b)(1)(A), 1314(b)(1)(B). These limitations are to represent the "average of the best" treatment technology available in the industrial category involved. Pet. App. 45a; *EPA v. National Crushed Stone Ass'n*, 449 U.S. 64, 76 n.15 (1980). The OCPSF regulations establish limitations on discharges of conventional pollutants based on the BPT standard.<sup>2</sup>

The second, more stringent, set of effluent limitations is to be based on the "best available technology economically achievable" (BAT). The BAT effluent limitations are to be set at a level that "will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants." 33 U.S.C. 1311(b)(2)(A). Thus, "[t]he distinction between 'best practicable' [BPT] and 'best available' [BAT] is intended to reflect the need to press toward increasingly higher levels of control." Congressional Research Service, *A Legislative History of the Water Pollution Control Act Amendments of 1972*, 93d Cong., 1st Sess. 170 (1972) [hereinafter *Leg. Hist.*]. BAT effluent limitations "should at a minimum be referenced to the best performer in any industrial category." *Leg. Hist.* 1468-1469; S. Rep. No. 414, 92d Cong., 1st Sess. 50 (1971); see, e.g., *American Paper Inst. v. Train*, 543 F.2d 328, 346 (D.C. Cir.), cert. dismissed, 429 U.S. 967 (1976). The OCPSF regulations

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<sup>2</sup> Conventional pollutants are measured, *inter alia*, by biochemical oxygen demand (BOD) – which measures the oxygen required by biological organisms to assimilate the biodegradable portion of a waste under aerobic conditions – and by total suspended nonfilterable solids (TSS) – which measures the dispersed insoluble inorganic and organic compounds in the wastewater. 33 U.S.C. 1314(a)(4); 40 C.F.R. 401.16.

establish effluent limitations for toxic pollutants based on the BAT standard.<sup>3</sup>

For direct dischargers, the effluent limitations are implemented and enforced through individual "national pollutant discharge elimination system" (NPDES) permits issued pursuant to the Act. 33 U.S.C. 1342. Each NPDES permit contains numerical discharge limits and other specific terms and conditions governing the activities of the discharger to which it applies.<sup>4</sup>

2. *The Regulatory History.* The OCPSF regulations, codified at 40 C.F.R. Pt. 414, apply to approximately 1000 plants that produce a wide variety of organic chemicals, plastics and synthetic fibers. 52 Fed. Reg. 42,522, 42,525 (1987). In these regulations, EPA promulgated effluent limitations guidelines and standards for 3 conventional pollutants and 63 toxic pollutants for new and existing plants

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<sup>3</sup> Toxic pollutants are those listed in accordance with 33 U.S.C. 1317(a)(1). See 40 C.F.R. 401.15.

<sup>4</sup> Because the discharge limitations are established through national rulemaking and are uniformly applicable throughout an entire industrial category, EPA has established a system for addressing claims that a particular plant should not be held to the national effluent limitation guidelines and standards. See *Chemical Manufacturers Ass'n v. NRDC*, 470 U.S. 116, 131-133 (1985); *EPA v. National Crushed Stone Ass'n*, 449 U.S. at 80. Under that system, EPA may grant a "fundamentally different factor" (FDF) variance, and establish for a particular facility an alternative to the otherwise applicable national effluent limitation guideline. 40 C.F.R. Pt. 125, Subpt. D.

Congress codified this approach in the 1987 amendments to the Act, recognizing the FDF procedure as the appropriate way to consider unique factors applicable to a particular facility, thus avoiding undue complication and delay in establishing national effluent guidelines and standards. H.R. Rep. No. 189, 99th Cong., 1st Sess. 26 (1985). An FDF variance will be granted if the applicant "demonstrates to the satisfaction of [EPA]" that the criteria set forth in 33 U.S.C. 1311(n)(1)(A) and (B) are met.

that discharge directly and indirectly into the national waters.<sup>5</sup> *Id.* at 42,580, 42,581. Implementation of these regulations will remove more than 100 million pounds of pollutants annually from those waters. *Id.* at 42,537, 42,539, 42,548.

a. EPA selected different model pollution control technologies to establish effluent limitations for the different types of pollutants discharged by plants within the OCPSF category. See, *e.g.*, 52 Fed. Reg. 42,536-42,544 (1987). These model technologies were used to establish the particular level of control required by the Act through the use of actual data and various analytical and statistical modeling techniques. EPA collected raw data from certain OCPSF plants that had used a selected model technology in the past, and edited the data based upon various general criteria to eliminate plants or sets of data that were unusable, or that represented inadequate performance. See, *e.g.*, *id.* at 42,533-42,536, 42,539-42,540.<sup>6</sup> A "long-term average" concentration of the discharge levels for each pollutant achievable by the data base plants over time was then calculated from the edited data base.

EPA expects that facilities will design and operate their treatment systems to achieve pollution release levels below or at the appropriate long-term average; however, EPA

<sup>5</sup> The development of these limitations required a very technical and complex rulemaking process. Over an eleven-year period, EPA relied upon more than 59,000 data points reflecting actual discharges from existing plants (see R.114,686-R. 115,047 and R.15,316-R.115,563), performed numerous studies, received more than 15,000 pages of public comments on agency proposals, and produced 2,500 responses to these comments. The process resulted in an administrative record comprised of approximately 600,000 pages. Pet. App. 2a, 23a; 52 Fed. Reg. 42,526-42,531, 42,554 (1987).

<sup>6</sup> This editing ensured, to the extent practicable, that the selected plants represented an adequate level of control for use in establishing the limitations.

establishes limitations at substantially higher levels to allow for fluctuations in discharge levels that may reasonably occur above and below the long-term average. Therefore, EPA routinely establishes two variability factors for each pollutant to reflect the maximum expected deviations that may occur during one-day and monthly periods if the model technology is operated properly. This factor, which is always greater than one, is then multiplied by the long-term average for each pollutant to obtain the actual limitations: the "maximum for any one day" and "maximum for monthly average" limitations and standards for each pollutant in 40 C.F.R. Pt. 414, Pet. App. 87a.

EPA calculates variability factors by using statistical modeling techniques that extrapolate from the edited data base to estimate the probability of every theoretically possible discharge. The daily maximum and monthly maximum average variability factors are calculated from statistical distribution curves developed for each pollutant. These distribution curves are generated by various mathematical equations using values calculated from the actual data. C.A. App. 3877, 3907-3911, 4438-4441, 4448-4461. The distribution curves are thus hypothetical constructs that describe the probability that any given discharge level—from just above zero to infinity—will occur; although any discharge level is theoretically possible, extremely high levels are exceedingly improbable, and often actually impossible. See *ibid.*<sup>7</sup>

Variability factors are intended to provide meaningful levels of control. They are thus calculated to reflect only the reasonable variations in pollution discharge levels in effluent from a properly operated facility, and not merely

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<sup>7</sup> The point on the curve below which all of the statistical distribution falls, the 100th percentile, represents an infinite discharge level (C.A. App. 2994), such a discharge is, of course, not possible in practice.

theoretically possible discharge levels, or ones resulting from poor operation. See 52 Fed. Reg. 42,564-42,565 (1987). Accordingly, EPA consistently establishes the daily and monthly variability factors at the 99th and 95th percentiles — *i.e.*, the points on the curve of hypothetically possible discharges below which 99 and 95% of the daily and monthly average distributions fall, respectively.

In the OCPSF industry, EPA calculated variability factors that range from 1.22 to 15.7 for the daily maximum and maximum monthly average limitations (C.A. App. 3879-3882, 3920-3924). When multiplied by the long-term averages, the variability factors result in generous effluent limitations and guidelines, which provide facilities in the OCPSF category with very wide operating margins, permitting them to discharge at levels ranging up to 15 times the long-term average performances of the model facilities.

In response to concerns that similar limitations previously calculated under the Act failed to account for variations that might occasionally occur despite exemplary operating and quality control procedures, EPA promulgated a regulatory "upset" defense in 1979. 44 Fed. Reg. 32,854, 32,863.<sup>8</sup> Accordingly, each NPDES permit issued by EPA now provides dischargers with an affirmative defense to prosecution for any violation of the applicable limitations where the excess discharge is uncontrollable, provided that the criteria set forth in 40 C.F.R. 122.41(n) are satisfied.<sup>9</sup> See 52 Fed. Reg. 42,565-42,566 (1987).

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<sup>8</sup> See pp. 21-22, *infra*.

<sup>9</sup> 40 C.F.R. 122.41(n)(1) specifies that an "upset" occurs when there is an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment

b. Certain BAT limitations in the OCPSF regulations are based on in-plant steam stripping technology.<sup>10</sup> EPA used data from a number of plants using this technology to generate the BAT limitations for 28 volatile pollutants. For 12 of these pollutants, EPA used 308 data points from two industry plants (PPG plant 913 and Dow plant 415) to develop the limitations. For most of these twelve pollutants, including chloroform and trichloroethylene (TCE), EPA combined and averaged the data from these two plants to calculate the long-term averages used to determine the limitations on discharge levels. C.A. App. 3898, 3908-3910. In accordance with the procedure outlined above, EPA "fitted" the steam-stripping data to the appropriate statistically calculated daily maximum and maximum monthly average distribution curves, from which variability factors were calculated based upon the 99th and 95th percentiles, respectively. The daily maximum and maximum monthly average variability factors were multiplied by the long-term averages for each pollutant to establish the daily maximum and maximum monthly average limitations for each pollutant. All but two of the 308 data points from these two plants fell within each of the limitations so calculated. In the case of TCE, one data point from Dow plant 415 was above the daily maximum limitation, although

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facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.  
See also 40 C.F.R. 403.16.

<sup>10</sup> Steam stripping removes pollutants by passing superheated steam through a distillation column containing preheated wastewater and some type of condenser materials. The volatile pollutants collect on the condenser materials, from which they are then removed. Pet. App. 111a. The amount of volatile pollutants that can be removed by a steam-stripper can be adjusted by altering the height of the column, the contents of the condenser, the steam pressure, and the temperature of the preheated wastewater. See 52 Fed. Reg. 42,540 (1987).

all the PPG plant 913 data points fell below that limitation. In the case of chloroform, the average of PPG plant 913 data points was above the monthly average limitation, although the average of the Dow plant 415 data points fell below that limitation.<sup>11</sup>

3. *The Opinions Below.* Twenty-eight industry petitioners (including individual companies and industry trade associations) and the Natural Resources Defense Council raised numerous challenges to the OCPSF regulations. The court of appeals carefully reviewed these challenges, well aware that "judicial review 'must be based on something more than trust and faith in EPA's experience[;]' a court may not respond to claims of technical expertise by 'rubber stamping' an agency decision as correct." Pet. App. 28a (footnote omitted).<sup>12</sup> The court then rejected all of the industry petitioners' arguments and the majority of those raised by NRDC, remanding a portion of the rule for

<sup>11</sup> Specifically, the overall average discharge level from PPG plant 913 for chloroform was 129.2 micrograms per liter (ug/l), slightly above the promulgated monthly average chloroform limitation of 111 ug/l. (The plant 913 average figure is somewhat misleading, since it is based on one month during which the plant achieved the monthly average limitation, one month when it did not achieve that limitation, and a single data point from a third month that was above that limitation.) The overall average discharge level for chloroform at Dow plant 415, however, was 10.5 ug/l. R. 115,500.

Dow plant 415 had one daily TCE discharge of 85 ug/l, which exceeded the maximum daily limitation of 69 ug/l. Nevertheless, The Dow plant's long-term average discharge level for TCE was only 16.1 ug/l, and PPG plant 913 had no daily TCE discharge level greater than the minimum detection level of 10 ug/l. R. 115,508; Pet. App. 112a, 190a-191a. (The court of appeals uses the term ppb, for parts per billion, which is equivalent to ug/l.)

<sup>12</sup> A considerable body of case law has evolved establishing the standards for judicial review of the methodology employed by EPA in promulgating effluent limitations under the Act. Pet. App. 25a-26a nn.38, 39 (citing cases).

further consideration. *Id.* at 29a-172a. It subsequently rejected most of the claims raised by the industry petitioners on rehearing, modified its opinion, and remanded an additional portion of the rule. *Id.* at 173a-195a. Petitioner now seeks certiorari on two issues which were rejected by the court of appeals both initially and on rehearing.

a. In the court of appeals, petitioner challenged the BAT limitations that EPA established for certain volatile pollutants, based on steam-stripping as the model technology. Petitioner asserted that because the edited data bases from two plants (PPG plant 913 and Dow plant 415) were utilized to establish nearly all the relevant limitations, each of those plants was the "best" for purposes of establishing those limitations. But because the overall averaged data from PPG plant 913 exceeded the final monthly average chloroform limitation and one data point from Dow plant 415 exceeded the final daily TCE limitation, petitioner asserted that no one plant could achieve all the limitations that were based upon the data from these two plants. Petitioner contended that this failure of any one plant to achieve the limitations for all the pollutants meant that none of the limitations was "achievable" within the meaning of 33 U.S.C. 1314(b)(2).

Petitioner also argued that because the relevant facility wastestreams contain many pollutants, a plant's particular wastestream characteristics (or matrix) may cause interferences that prohibit some of the pollutants from being treated within that wastestream. According to petitioner, EPA's failure to account for such wastestream characteristics explained why PPG plant 913 exceeded the chloroform limit and Dow plant 415, on a single occasion, exceeded the TCE limit.

The court of appeals rejected petitioner's first argument on two independent grounds. First, the court explained that

the one, unusually high discharge value for TCE in the Dow plant 415 data base does not make the limitation unachievable. The court suggested that the atypical value resulted either from an upset that was unlikely to recur or from quality-control problems within Dow's control. Pet. App. 112a-113a, 190a-191a.<sup>13</sup> Second, the court of appeals rejected petitioner's premise that unless one plant can be shown to have achieved all the limitations for TCE and chloroform, the limitations are necessarily unachievable under the Act. The court thus upheld EPA's interpretation of the statute that it is responsible for administering, concluding that the Act permits EPA to determine the "best" plant for establishing limitations on a pollutant-by-pollutant basis. *Id.* at 112a-113a. For this reason, "an exceedance by one of the data-base plants is irrelevant so long as another data-base plant demonstrates that the limitations are achievable." *Id.* at 113a. Accord *id.* at 191a.

The court of appeals also rejected petitioner's claim that the wastestream matrices of the data base plants made the limitations unachievable. Pet. App. 113a-114a. The court of appeals relied upon EPA's determination that steam-stripper technology can be modified to account for a particular plant's wastestream matrix and that through the use of such properly designed technology all the OCPSF plants would be able to achieve the limitations for volatile pollutants. *Ibid.*

b. Petitioner also argued below that EPA's use of the 99th and 95th percentiles to establish variability factors will result in excess discharges that cannot be controlled by well-

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<sup>13</sup> The court did not discuss whether the failure of PPG plant 913 to quite satisfy the monthly average limitation for chloroform meant that that plant could not achieve all the limitations. Nevertheless, the court's conclusion that there was no showing that Dow plant 415 could not meet the limitations for all pollutants necessarily indicated that petitioner's objections to those limitations were without merit.

designed, well-operated facilities that employ model technology. It further contended that the regulatory upset defense (40 C.F.R. 122.41(n)) does not provide adequate relief where uncontrollable exceedances occur because EPA allegedly edited, *i.e.*, deleted, all data that would satisfy that regulatory defense.

The court of appeals rejected these arguments. It explained that the discharges represented in EPA's model that exceeded the 99th and 95th percentiles of the average statistical distribution curves were reasonably excluded in EPA's variability factor calculation, because EPA could reasonably assume that these points were isolated and extreme departures from normal performance that were due to quality-control problems. Pet. App. 90a-93a, 188a. Where discharges exceed the 99th and 95th percentiles, the court reasoned that, if they result from quality control problems, they can be controlled, and if they cannot be controlled, the regulatory upset defense is available. *Id.* at 93a, 189a. Finally, the court rejected petitioner's contention that all individual data points that may have resulted from upsets were deleted from the data base. *Id.* at 189a.

#### ARGUMENT

The decision below is correct and does not conflict with any decision of this Court or of any other court of appeals. Moreover, the issues raised by petitioner are extremely narrow and technical, and turn on the precise record in this rulemaking. Thus, they do not merit review by this Court.

1. a. The gravamen of petitioner's first argument is that the monthly-average chloroform and daily maximum TCE limitations are not "achievable" within the meaning of 33 U.S.C. 1311(b)(2)(A) and 1314(b)(2)(B) because no one plant in the EPA data base complied perfectly with the limitations for both pollutants. See note 11, *supra*. The court

of appeals, however, correctly held that the Dow plant's single TCE discharge above the daily maximum limitation did not mean that the limitation was not achievable by that plant.<sup>14</sup> Therefore, petitioner's argument, which is based on the claim that no one plant can meet all the limitations, amounts at bottom to an attack on this determination of the court below, a determination that is fully supported by the record. Petitioner's objections to that narrow fact-based determination do not warrant review by this Court.<sup>15</sup>

b. There is, in any event, no merit to petitioner's assertion that it was inappropriate for EPA to base the limitations for chloroform and TCE on an average of the data from two plants with good records in using the steam stripper technology, rather than from a single best plant. It is natural that the data from two different plants will differ to some extent, and in such instances averaging of the two to develop technology-based limits is entirely reasonable. *BASF Wyandotte Corp. v. Costle*, 598 F.2d 637, 655 (1st

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<sup>14</sup> The court below explained (Pet. App. 112a-113a, 190a-191a) that EPA could reasonably conclude that the sole Dow TCE discharge that exceeded the TCE limitation resulted from an upset or a correctable quality control problem, in light of the plant's long-term average TCE discharge level and "because on all other occasions the Dow plant was able to perform within the limitations." *Id.* at 112a.

<sup>15</sup> The court's reliance on EPA's expertise when interpreting sampling data (Pet. App. 190a-191a) is unexceptional. See, e.g., *United States Steel Corp. v. Train*, 556 F.2d 822, 842 (7th Cir. 1977) ("EPA \*\*\* is entitled to use its expertise in pollution-control technology in judging the reliability or representative quality of particular data" (citing cases)). Moreover, the court's decision is entirely consistent with other cases. See, e.g., *American Petroleum Inst. v. EPA*, 540 F.2d 1023, 1034 (10th Cir. 1976) (limitations upheld where compliance 90, 80 and 70% of the time), cert. denied, 430 U.S. 922 (1977); *American Meat Inst. v. EPA*, 526 F.2d 442, 458-459 (7th Cir. 1975) (limitations upheld where one plant met them during 15 months out of a two-year period and the other did so for three-quarters of a two-year period).

Cir. 1979), cert. denied, 444 U.S. 1096 (1980).<sup>16</sup> Nor was that approach really detrimental to petitioner; petitioner's argument overlooks the fact that averaging the PPG and Dow plant data necessarily increased the chloroform limitations above those that would have resulted were the Dow plant alone, with its lower chloroform discharge levels, utilized as the single "best" plant for developing those limits. See note 11, *supra*; cf. Pet. App. 90a.<sup>17</sup>

c. Petitioner also contends that the decision of the court below is wrong as a matter of law, on the theory that the Act prohibits EPA from selecting the best plant for establishing BAT effluent limitations on a pollutant-by-pollutant basis. But the plain language of the relevant statutory provisions (33 U.S.C. 1311(b)(2)(A), 1314(b)(2)(B)) contains no such prohibition, which would be illogical and inconsistent with the statutory purpose.

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<sup>16</sup> Because the data obtained from each plant was averaged to develop the chloroform and TCE limitations, it was inevitable that some of that data would lie above the average. It is accordingly scarcely surprising that some of the data from either plant may exceed the limitations that are based upon the average of the data.

<sup>17</sup> The Second Circuit in *Hooker Chemicals & Plastics Corp. v. Train*, 537 F.2d 620, 633 (1976), addressing the use of averaging to develop BPT limitations, identified the central flaw in the type of argument petitioner makes here:

The fallacy of Petitioners' argument is the assumption that inclusion of an industrial plant within the category "best existing" constitutes an implied determination that the plant's technology is the "best practicable" and that the plants' effluent discharge rates are the maximum achievable [within the relevant time frame].

See also *American Meat Inst. v. EPA*, 526 F.2d at 457. Similarly, petitioner here argues that because its plant is among the best performers, its performance is the maximum achievable by BAT technology. This argument, rejected in *Hooker Chemicals* in the BPT context, is even less persuasive in the context of BAT limitations, which "should at a minimum be referenced to the best performer" (Lew. Hist. 1468-1469).

Moreover, none of the cases on which petitioner relies supports its contention or conflicts with the decision below.

i. A requirement that a single best plant be selected for establishing the limitations for all the pollutants regulated under BAT would be illogical and inconsistent with the structure and goals of the Act. This is particularly evident when different pollutants have to be treated by different technologies. See 52 Fed. Reg. 42,539-42,544 (1987). In this situation, a plant may utilize entirely separate technologies to treat two different pollutants, with the treatment of one pollutant having no bearing on the treatment of the other. There is no reason, in such a situation, why EPA should be required to identify a single best performer for both pollutants if no one plant's treatment is exemplary for both.

The analysis is no different where, as here, the treatment technology is the same for two pollutants.<sup>18</sup> There is still no reason why EPA should be required to identify a single plant as the best performer for both pollutants, unless the treatment or presence of one pollutant somehow impairs the treatment of the other, *i.e.*, wastestream characteristics interfere with the proper treatment of both pollutants. See, *e.g.*, 52 Fed. Reg. 42,540-42,544 (1987). EPA properly considered these technical concerns (*ibid.*; C.A. App. 3732),<sup>19</sup> and its conclusion that wastewater

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<sup>18</sup> The Act does not distinguish between treatment of multiple pollutants by a single technology and by separate technologies, and there is no basis to maintain, as petitioner does, that the Act *requires* that a single plant meet all of the limitations in the former situation. The statutory language simply does not support such a restriction on EPA's expert judgment.

<sup>19</sup> EPA also considered the costs for various types of steam-stripper upgrades in its determination that the BAT limitations are achievable. Surreply C.A. Addendum Exh. 14.

matrices do not preclude compliance with the limitations was properly upheld. Pet. App. 114a. Throughout the rulemaking proceedings, petitioner has provided absolutely no technical information to rebut these findings.<sup>20</sup> Therefore, this issue does not warrant review by this Court.<sup>21</sup>

ii. Petitioner's claim of a conflict in the decisions is incorrect. In making this claim, petitioner places principal reliance on a brief observation in *Tanners' Council of America v. Train*, 540 F.2d 1188 (4th Cir. 1976). But that case is readily distinguishable from this one. In the first place, that court was interpreting the less stringent BPT limitations; the court itself emphasized that the statutory standards for the two limitations are quite different. *Id.* at 1195. Moreover, the court in *Tanners' Council* addressed an entirely different issue from the ones involved in the

<sup>20</sup> Petitioner suggests in this Court that operational changes may enhance the steam strippers' ability to remove certain pollutants while impairing its ability to remove others. Pet. 5. But petitioner neither presented any information to support such a claim during the rulemaking, nor does it now cite any record support for its assertion.

<sup>21</sup> In any event, such plant-specific concerns are properly addressed in the context of a fundamentally different factors variance proceeding (see note 4, *supra*), rather than in a challenge to the national limitations themselves. Pet. App. 74a-77a; see generally *Chemical Manufacturers Ass'n v. NRDC*, 470 U.S. at 131-133; *EPA v. National Crushed Stone Ass'n*, 449 U.S. at 80; NRDC Br. in Opp. 12-14. Petitioner has filed an EDF application seeking a variance for its plant 913 from the chloroform limitation; EPA recently has indicated its tentative decision to deny the variance. Lake Charles American Press, February 24, 1990. Petitioner may obtain judicial review of the final agency decision. See *Georgia Pacific Corp. v. EPA*, 671 F.2d 1235 (9th Cir. 1982); Pet. App. 83a. Petitioner will accordingly have an opportunity for judicial review, after exhausting applicable agency procedures, of its contentions that it cannot meet the applicable BAT limitations. There is no need for this Court to consider those contentions in this case.

present case – whether EPA, in establishing limitations for a given industrial category had sufficiently substantiated its decision to rely on technology from a different category with dissimilar wastes. The court's observation that “[a] few plants [in the regulated industrial category] are presently capable of meeting the limitations for some, but not all of the pollution parameters” (*id.* at 1193) was made in the context of its consideration of whether EPA had satisfied the established technology transfer requirement – that EPA “make a reasonable prediction that the technology, if used in the industry, will be capable of” meeting the limitations. *Id.* at 1192 (citing cases). Because the court found that the record before it contained “no evidence” to support EPA's conclusion that the affected industry could consistently meet the promulgated limits by the use of the designated technology, it remanded the case to EPA for further proceedings. *Id.* at 1193-1194. In sum, the dictum in *Tanners' Council* does not establish the general principle urged by petitioner, even in the BPT context; it is plainly not in conflict with the conclusion of the court below regarding the BAT limitations at issue here.

There is likewise no merit to petitioner's additional claim (Pet. 12) that the decision below is “at odds with” *Association of Pacific Fisheries v. EPA*, 615 F.2d 794 (9th Cir. 1980); *CPC Int'l, Inc. v. Train*, 540 F.2d 1329 (8th Cir. 1976), cert. denied, 430 U.S. 966 (1977); and *National Lime Ass'n v. EPA*, 627 F.2d 416 (D.C. Cir. 1980). As the court below observed (Pet. App. 191a), neither *Pacific Fisheries* nor *CPC Int'l, Inc.* is inconsistent with the instant case. ‘Here, in contrast [to those decisions], at least one plant can meet every BAT limitation.’ *Ibid.* In addition, in *Pacific Fisheries* the court remanded one part of the regulation under consideration there to the agency simply because the study on which EPA had relied in establishing the relevant limitation was insufficient: “[t]he study measured the

BOD<sub>5</sub> and TSS contained in the wastewater before entry to the lagoon \* \* \*, but the record reveals only the reduction in BOD<sub>5</sub> in the effluent leaving the lagoon. \* \* \* [T]here is no indication as to whether the TSS and O & G levels would be sufficiently reduced" to comply with the limitations on those pollutants. 615 F.2d at 819. Similarly, in *CPC Int'l, Inc.*, the court analyzed the data upon which EPA relied, and found that "the TSS standard proposed by the EPA finds no support from [those data]" 540 F.2d at 1339.<sup>22</sup>

2. Petitioner's second principal challenge concerns EPA's determination of the variability factors for use in calculating the OCPSF effluent limitations guidelines and standards. Petitioner contends that EPA's use of the 99th and 95th percentile approach to establish variability factors will result in exceedances that cannot be controlled by well-designed, well-operated facilities that employ model technology. It further contends that the regulatory upset defense (40 C.F.R. 122.41(n)) does not provide adequate relief where uncontrollable exceedances occur because EPA allegedly edited, *i.e.*, deleted, all data that would satisfy that defense.

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<sup>22</sup> *National Lime Ass'n* involved regulations based on a different methodology to account for variability under a quite dissimilar statutory provision: Section 111 of the Clean Air Act (42 U.S.C. 7411). In contrast to the Clean Water Act, the Clean Air Act contains no general variance provision (see note 4, *supra*), so Section 111 standards must account for "all variations of operating conditions being considered anywhere in the country" 627 F.2d at 433 (italics omitted). Accordingly, the court in *National Lime Ass'n* criticized EPA's exclusion from its data base of the data from a plant that did not achieve the standards selected, although it held that this alone did not necessarily make the standard unachievable. *Id.* at 444. Moreover, three plants in the data base upon which EPA relied *did* achieve all those standards. *Ibid.* Even under petitioner's interpretation of the Clean Water Act, that fact would have justified BAT-based limitations under that Act.

The decision below is correct. It does not conflict with any decision of this Court or any of the many court of appeals decisions that have already addressed this issue.<sup>23</sup> Petitioner essentially disputes the highly specific fact-based findings that were made by EPA and upheld by the court of appeals, based upon a thorough analysis of EPA's editing criteria contained in the rulemaking record. There is no need for further review by this Court.

Each court of appeals that has reviewed EPA's methodology in establishing variability factors has recognized that EPA's use of the percentile approach is designed to result in meaningful controls on daily maximum and maximum monthly average releases, while accounting for only reasonable fluctuations in treatment. The limitations are not designed to reflect extreme hypothetical discharge levels, or even to permit poor performance that can be controlled by quality control measures. See, e.g., *Weyerhaeuser Co. v. Costle*, 590 F.2d at 1057. EPA's percentile approach implements the important goal of ensuring that vigilant attention is paid to the reduction of controllable variations in treatment levels on a daily and monthly basis through the use of proper maintenance and quality control measures. *Ibid.*; see, e.g., *United States Steel Corp. v. Train*, 556 F.2d

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<sup>23</sup> See *American Petroleum Inst. v. EPA*, 661 F.2d 340, 350-353 (5th Cir. 1981); *Corn Refiners Ass'n v. Costle*, 594 F.2d 1223, 1224-1226 (8th Cir. 1979); *Weyerhaeuser Co. v. Costle*, 590 F.2d 1011, 1056-1058 (D.C. Cir. 1978); *United States Steel Corp. v. EPA*, 556 F.2d 822, 841-842 (7th Cir. 1977); *Marathon Oil Co. v. EPA*, 564 F.2d 1253, 1266-1274 (9th Cir. 1977); *CPC Int'l, Inc. v. Train*, 540 F.2d 1329, 1336-1338 (8th Cir. 1976), cert. denied, 430 U.S. 966 (1977); *American Petroleum Inst. v. EPA*, 540 F.2d 1023, 1035-1036 (10th Cir. 1976), cert. denied, 430 U.S. 922 (1977); *EMC Corp. v. EPA*, 539 F.2d 973, 985-986 (4th Cir. 1976).

at 842; *American Petroleum Inst. v. EPA*, 540 F.2d at 1036; 52 Fed. Reg. 42,564-42,565 (1987); C.A. App. 2987-3004.

The court of appeals recognized that even "well-operated plants occasionally will experience quality control problems." Pet. App. 190a. As the court concluded, it is reasonable to expect that the extreme discharges represented by one percent and five percent of the statistical distributions will either be controllable by better quality control practices and plant operations, or will be subject to the upset defense. *Ibid.*; see 52 Fed. Reg. 42,564, 42,565 (1987). This fact-based determination does not warrant review by this Court.

Contrary to petitioner's claim, EPA's use of variability factors is consistent with each of the court of appeals decisions that has considered this issue. As the courts have recognized, given EPA's statistical methodology "[t]here is always a theoretical chance that a plant achieving the limitations on a long-term basis will exceed the monthly and daily limits." *American Petroleum Inst.*, 540 F.2d at 1035-1036.<sup>24</sup>

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<sup>24</sup> The Ninth Circuit explained in *Marathon Oil Co. v. EPA*, 564 F.2d 1253, 1272 (1977), that establishing a limitation that assured 100% compliance "would probably be so liberal as to be worthless as a control standard." See pp. 6-7 & note 7, *supra*.

Petitioner makes much of the contention that EPA's percentile method of establishing variability factors results in a predictable non-compliance rate, citing, *inter alia*, a "Training Manual for NPDES Permit Writers." Pet. Br. 17; Pet. App. 261a. That document, developed by an outside contractor in May 1987, states on its title page that "[t]he material in this manual is for instructional purposes only[;] [i]t \* \* \* does not necessarily represent official policy of the U.S. EPA." In any event, the manual, which is not part of the administrative record below and was accordingly struck from the record by the court of appeals, is a general document for permit writers; it was not intended to address the specific practices employed in the OCPSF rulemaking.

It is, however, irrelevant whether EPA's methodology is construed to result in a predicted noncompliance rate, or, as the court below

Most of the cases on which petitioner relies were decided prior to 1979, when EPA promulgated the regulatory upset defense. At that time, EPA addressed this matter through the exercise of its enforcement discretion alone. Most of the courts of appeals upheld EPA's approach, approving its policy of not bringing enforcement actions where rare exceedances that could not be controlled occur, and recognizing that limitations should be adequately stringent to require facilities to control extremes in variability.<sup>25</sup>

The Ninth and the Fourth Circuits, however, in the cases upon which petitioner relies (Pet. 17, 19), remanded certain technology-based limitations because EPA had not formally provided relief to offset the possibility of an uncontrollable exceedance.<sup>26</sup> In *Marathon Oil*, 564 F.2d at 1272, the court required that EPA provide relief for "excursions" when they actually occur, by determining whether exemplary use of [the model technology] could have avoided the excursion." Similarly, in *FMC Corp.*, 539 F.2d at 985-986, the Fourth Circuit required EPA to provide relief for possible exceedances. In 1979, EPA promulgated the upset

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concluded (Pet. App. 190a), simply to reflect the possibility of uncontrollable exceedances or occasional quality control problems. See, e.g., *American Petroleum Inst.*, 540 F.2d at 1036. Under either approach, the availability of the upset defense affords adequate relief for uncontrollable exceedances.

<sup>25</sup> See *Weyerhaeuser*, 590 F.2d at 1056-1058; *United States Steel Corp.*, 556 F.2d at 841-842; *Corn Refiners Ass'n*, 594 F.2d at 1224-1226; *CPC Int'l, Inc.*, 540 F.2d at 1336-1339; *American Petroleum Inst.*, 540 F.2d at 1035-1036.

<sup>26</sup> Petitioner also relies on the D.C. Circuit's decision in *National Lime*. That decision, which reviewed regulations promulgated under the Clean Air Act, is simply inapposite. See note 22, *supra*. Significantly, the D.C. Circuit in *Weyerhaeuser*, 590 F.2d at 1056-1058, upheld EPA's approach under the Clean Water Act before the upset defense was promulgated.

defense to address these concerns. 44 Fed. Reg. at 32,863. Because the upset defense is available to offset uncontrollable exceedances in the OCPSF category,<sup>1</sup> EPA's approach in the rulemaking is consistent with *Marathon Oil* and *FMC Corp.*<sup>27</sup>

Petitioner additionally contends that the regulatory upset defense will not be available in case of an uncontrollable exceedance of the OCPSF limitations by a properly designed and operated facility, because EPA allegedly edited from the data base every instance to which the upset defense would apply before EPA selected variability factors. This argument is based upon the erroneous assumption that one of EPA's "BAT technology performance" editing criteria, which identifies "treatment system upsets" as an example of unrepresentative performance (Pet. App. 189a (quoting C.A. App. 3883, 3885)), means that EPA edited all data points that would satisfy the highly fact-intensive regulatory upset defense.<sup>28</sup>

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<sup>27</sup> Petitioner also asserts (Pet. 19) that the decision below is "at odds with" *American Petroleum Inst.*, 661 F.2d at 347, decided after the regulatory upset defense was promulgated. In that decision, the court reviewed challenges to technology-based wastewater regulations for the petroleum refining industry that were developed using EPA's percentile approach. The court carefully reviewed the decisions in *FMC Corp.* and *Marathon Oil*, and concluded, in the context of the issues before it, that the regulatory upset defense satisfied the concerns expressed in those cases. *Id.* at 350-353. Because the upset defense applies to the OCPSF regulations, the decision below and EPA's regulations are consistent with *American Petroleum Inst.*

<sup>28</sup> EPA could scarcely have applied the regulatory upset criteria set forth in 40 C.F.R. 122.41(n)(3) to the thousands of data points it utilized to establish the OCPSF limitations – even had it wished to do so, it lacked sufficient information to edit on such a basis. See, e.g., C.A. App. 3872 (BPT editing). The detailed daily operating conditions of the plants which submitted data were known only to the plant operators, not to EPA. C.A. App. 2987. See Pet. App. 189a-191a. EPA's criteria for editing the plants and data sets were necessarily far more general

The court of appeals carefully reviewed EPA's editing criteria and properly rejected this argument. *Ibid.*<sup>29</sup>

In any event, the court below held that regardless of how EPA edited its data base, the regulatory upset defense remains available to PPG plant 913 (or any other facility) if petitioner can show that any such exceedance, if and when it occurs, was beyond its control (Pet. App. 93a):

If these data points result from quality-control problems, the exceedances they represent are within the control of the plant. If, however, the data points represent exceedances beyond the control of the industry, the upset defense is available.

In short, the appropriate time to make the factual inquiry as to whether a particular exceedance is uncontrollable is when the exceedance occurs and a specific factual record exists. Petitioner's speculative concerns about the possibility of future reliance on the regulatory upset provision constitute no proper basis for challenging the entire OCPSF regulation in this Court.

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than petitioner's argument assumes, and did not include a regulatory upset criterion. See, e.g., C.A. App. 3868-3873, 4428-4435; Surreply C.A. Addendum Exh. 16 (possible spills, upsets, and mechanical failures included in the edited BPT data base); 52 Fed. Reg. 42,540 (1987) (BAT editing); Surreply C.A. Addendum Exh. 15 (same).

<sup>29</sup> Petitioner seeks to contradict the court's findings by noting the only instance in which EPA edited two specific data points from a single plant's data set. Pet. 19. EPA, however, edited these two data points because they resulted from improper operation, not because they satisfied the regulatory upset provision. C.A. App. 3108, 3890. Moreover, and contrary to petitioner's assertion, the fact that the PPG plant average for chloroform and the single Dow plant data point for TCE were not edited from the data base does not render the upset defense inapplicable to any future exceedances that may occur.

**CONCLUSION**

The petition for a writ of certiorari should be denied.  
Respectfully submitted.

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\* The Assistant Attorney General is disqualified in this case.

